

**MUNICIPAL SEPARATE
STORM SEWER SYSTEM (MS4)
COMPLIANCE INSPECTION**

**EVALUATION CONDUCTED: September 16, 2011
FINAL REPORT DATE: October 19, 2011**

**IDAHO TRANSPORTATION DEPARTMENT,
DISTRICT #1
MS4 PERMITTEE
IDAHO**

**United States Environmental Protection Agency
Region 10
1200 Sixth Street
Seattle, WA 98101**

Contents

Section 1.0	Introduction.....	1
Section 2.0	Permit Compliance Review	2
Section 2.1	Annual Report.....	3
Section 2.2	Public Education and Outreach	3
Section 2.3	Public Involvement/Participation	5
Section 2.4	Illicit Discharge Detection and Elimination (IDDE).....	5
Section 2.5	Construction	8
Section 2.6	Post-Construction.....	9
Section 2.7	Pollution Prevention and Good Housekeeping	9
Section 2.8	Monitoring, Recordkeeping and Reporting Requirements	11
Section 3.0	Additional Observations and Recommendations for Improved Stormwater Management by the Permittee	13
Appendix A:	Inspection Schedule	
Appendix B:	Exhibit Log	
Appendix C:	MS4 Maps	
Appendix D:	Photograph Log	

Section 1.0 Introduction

In the summer of 2011, Julie Congdon, Compliance Officer, U.S. Environmental Protection Agency (EPA) Region 10, conducted a file review of the Idaho Transportation Department (ITD) District #1's Municipal Separate Storm Sewer System (MS4) Program. All of the MS4 Annual Reports were reviewed for compliance with the permit requirements. On September 16, 2011, an EPA Region 10 inspection team conducted a field inspection of the ITD District #1 MS4.

Discharges from the ITD District #1's MS4 are regulated under the National Pollutant Discharge Elimination System (NPDES) Permit No. IDS-028223 of Section 402(p) of the Clean Water Act, 33 U.S.C. §1342(p), and EPA's "Phase II" regulations for MS4 discharges, published in the Federal Register on December 8, 1999, 64 Fed. Reg. 68722 (hereafter, the Permit). The Permit is the first NPDES MS4 permit issued to the ITD District #1 (hereafter, ITD). ITD submitted an application for NPDES permit coverage dated July 24, 2003. ITD received confirmation of coverage from EPA effective January 1, 2009 and was subsequently issued NPDES Permit No. IDS-028223.

The MS4 owned and operated by ITD is located within Kootenai County, Idaho. ITD's responsibility includes the operation and maintenance of drainage systems associated with I-90, US-95, and a portion of Coeur d'Alene lake drive east of Coeur d'Alene. Within the Coeur d'Alene Urbanized Area, storm water from the ITD highway system generally drains into adjacent roadside ditch areas and infiltrates through vegetated areas and well draining soil. The Permittee's MS4 is physically interconnected to the MS4s of neighboring jurisdictions. The MS4 also discharges directly to Lake Coeur d'Alene and the Spokane River. The City of Coeur d'Alene (City) and ITD previously entered into a Cooperative Agreement for Maintenance of State Highway U.S. 95 within the city limits (Cooperative Agreement). Under the Cooperative Agreement, the City operates and maintains the MS4 along these roadways, while the Permittee has agreed to conduct snow removal, culvert maintenance and maintenance of unimproved roadsides on U.S. 95. Each MS4 operator is therefore responsible for the management of pollution discharged via their MS4s to waters of the United States within the Coeur d'Alene Urbanized Area in accordance with their respective NPDES permit. The purpose of this report is to evaluate the compliance of ITD with its permit; the City of Coeur d'Alene's compliance with its MS4 permit is addressed in a different report.

In addition to the road ways, ITD owns a maintenance facility within the Coeur d'Alene Urbanized Area, located at 600 W. Prairie Avenue. Additionally, ITD has a facility at 2800 Ramsey Road in Coeur d'Alene; activities at this facility include the storage of sand and salt for road application, and fleet storage, and maintenance. The W. Prairie and Ramsey Road facilities do not discharge to ITD's or any other entity's MS4 or to waters of the U.S.

The primary purpose of the file review and field inspection was to assess ITD's compliance with the requirements of the Permit through an assessment of ITD's implementation of applicable

program elements. Specifically the file review and field inspection included an evaluation of the following program areas or elements, which are described in the Permit:

Part II.B.1	Public Education and Outreach
Part II.B.2	Public Involvement/Participation
Part II.B.3	Illicit Discharge Detection and Elimination (IDDE)
Part II.B.4	Construction Site Stormwater Runoff Control
Part II.B.5	Post-Construction Stormwater Management
Part II.B.6	Pollution Prevention and Good Housekeeping for Municipal Operations

The inspection was an announced one: a notification letter was sent to John Perfect, the Operations Manager for ITD District #1, on July 28, 2011. On September 16, 2011, the EPA Inspection Team, Dustan Bott and Julie Congdon, conducted a series of interviews with members of ITD's staff, along with several site visits and field verification inspections. Dry weather conditions were experienced during the inspections. The Permit may be viewed at [http://yosemite.epa.gov/r10/water.nsf/NPDES+Permits/MS4+requirements+-+Region+10/\\$FILE/ATTDB0VB/IDS028223%20FP%20ITD%231%20MS4.pdf](http://yosemite.epa.gov/r10/water.nsf/NPDES+Permits/MS4+requirements+-+Region+10/$FILE/ATTDB0VB/IDS028223%20FP%20ITD%231%20MS4.pdf) . The field inspection schedule is presented in Appendix A. Mr. Bott and Ms. Congdon presented their credentials to the ITD representatives at the opening conference beginning at 9:00. The inspection concluded with a closing conference with all four ITD representatives at the end of the field inspection.

The primary representatives involved in the inspection were the following:

ITD District #1 Representatives:	John Perfect, Operations Manager Mike Hartz, Senior Environmental Planner Charlie While, Environmental Planner Wallace (Wally) Brown, Senior Transportation Technician
EPA Inspectors:	Julie Congdon, EPA Region 10 Dustan Bott, EPA Region 10

Section 2.0 Permit Compliance Review

The EPA Inspection team conducted an evaluation of ITD's MS4 program to assess compliance with the requirements of the Permit and their implementation of applicable program elements to ensure an effective MS4 program. As stated previously, ITD maintains coverage for discharges from its MS4 under NPDES Permit No. IDS-028223. The Permit became effective on January 1, 2009.

As required by Part II.B of the Permit, "Minimum Control Measures," the Permittee must accomplish six minimum control measures through their Storm Water Management Program. Based on a review of the conditions of the Permit and ITD's Annual Report, only those program

elements required two years from the permit effective date should have been fully implemented and functional at the time of the inspection.

The following sections discuss the findings from the file review, conducted by Julie Congdon, and the field inspection, conducted by Julie Congdon and Dustan Bott. The presentation of file review and inspection findings in this section of the report does not constitute a formal compliance determination or violation. All referenced documentation, including ITD's responses to the pre-inspection questionnaire, used as supporting evidence is provided in Appendix B, and photo documentation is provided in Appendix C.

Section 2.1 Annual Report

The purpose of an Annual Report is to document implementation of the SWMP during the previous year; evaluate program results and describe planned changes towards continuous improvement of the program. Part IV.C of the Permit outlines what information must be contained in each Annual Report.

A file review of the MS4 was conducted by Julie Congdon in advance of the field inspection. All of the MS4 Annual Reports were reviewed for compliance with the permit requirements. All Annual Reports had been submitted by the stated deadline in the Permit.

Overall assessment of the Annual Reports is that they are informative regarding ITD's implementation of the minimum control measures and its program activities, but it appears that some information and training provided by ITD is on a statewide level and does not pertain specifically to the MS4 area covered by District #1. In order to get a clearer understanding about ITD's compliance, EPA provided a list of questions to ITD in advance of the field inspection, requesting additional information to augment the information provided in the Annual Reports. The responses from ITD are noted in the bulleted sections below.

Section 2.2 Public Education and Outreach

In accordance with the specific requirements at Part II.B.1.a-e of the Permit, the Permittee must implement a public education program to educate the community about the impacts of stormwater discharges to the MS4 and local waterbodies.

Findings from the File Review

- 1) Per Part II.B.1.a of the Permit, ITD is required to develop and implement within two years of the effective date of the Permit a public education program. While the Permittee has implemented an education program, much of the work appears to be on a statewide level; it is unclear as to what education outreach and information is specific to the Coeur d'Alene area and the area of ITD's MS4.

- 2) ITD mentioned the newsletters are required by the Consent Decree¹. While the “Storm Events” newsletter is good and appears informative, it is unclear as to how many of those newsletters go to recipients in the Coeur d’Alene area.
- 3) In the pre-inspection questionnaire, EPA asked what education outreach, information and activities have been conducted specific to the Coeur d’Alene area/the Permittee’s MS4 area.
 - In response to Question 1 noted under “Public Education and Outreach” on the questionnaire, ITD answered only the portion of the question regarding the stormwater management education and training for ITD District #1 staff. ITD noted that it “offers instructor-led training opportunities in NPDES Inspection and regulations to ITD District employees and others outside the Department involved in construction inspection and highway maintenance”. There was no answer to the other areas of inquiry, i.e., distribution of ITD District # 1 appropriate and relevant storm water information, and updates to the ITD District # 1 webpage.
- 4) Though not required in the Permit, it was suggested in the *MS4 Program Evaluation Guidance*² to determine if public behavior changes are tracked by the permittee, in order to assess how the permittee may be promoting events or activities that would change problematic behaviors that impair water quality. Subsequently, EPA also asked how ITD tracked behavior changes in its general and target audiences.
 - In response to Question 2, ITD replied that it “trusts in the NPDES Inspector Course to inform its employees about NPDES regulations and responsible implementation of sediment and erosion control and stormwater management BMPs. Our principle means of controlling behavior and promoting NPDES expertise among staff focuses on keeping certifications current for key “on the ground” inspection staff and stressing the importance of water quality protection from the management level on down to the crews”.

Findings from Field Inspection

During the inspection interview, Mr. Hartz stated that its website is broken down by District. However, during a review of the ITD website when Ms. Congdon was in the office on Sept. 23, 2011, it was only through utilizing the search engine on the website that the stormwater webpage was located. It was on that page that MS4 reports were broken down according to their respective Districts.

Mr. Hartz also noted that it is participating in the Environmental Open House sponsored by the City of Coeur d’Alene. It is at this venue that ITD is distributing stormwater information to the public. This will be its second year of participation in this event.

¹ Consent Decree with Idaho Transportation Department.

<http://www.epa.gov/compliance/resources/decrees/civil/cwa/idahotransdept-cd.pdf>

² http://www.epa.gov/npdes/pubs/ms4guide_withappendixa.pdf and
http://www.epa.gov/npdes/pubs/ms4guide_appendicesb-d.pdf

Areas of Concern

The public education information and materials are not specific to the MS4 area for ITD District #1. While some information that ITD uses to educate the public about MS4s can be general and applies to many different Districts and areas, there should be some public information specifically geared towards the District #1 area of ITD in order for local citizens to understand the impacts of highway road runoff to Lake Coeur d’Alene.

Section 2.3 Public Involvement/Participation

Part II.B.2 of the Permit requires the Permittee to provide the public an opportunity in the development and implementation of the public involvement program.

Findings from the File Review

- 1) In Part II.B.2.b of the Permit, the Permittee must within two years of the effective date of the Permit make all SWMP documentation and Annual Reports available online through its regularly maintained website. Per a review of the ITD District #1 website in June 2011, there was no clear and obvious link to Annual Reports via Dist. 1 website (<http://itd.idaho.gov/publictransportation/dist1.htm>). Only through a keyword search of the state ITD website were the Annual Reports located.
- 2) In Part II.B.2.c of the Permit, ITD must promote the existing “Adopt a Highway” clean-up program. It is unclear as to how ITD is promoting this program or raising awareness and participation in the program. No link or information was found about the program on the District #1 website per a review of the website in June 2011.
 - In response to Question 3, ITD stated that areas available for adoption are marked with a sign with a 1-800 to call to adopt the area. Also noted in the response was that “Information on ITD’s Adopt-A-Highway program is provided on the ITD web site and through brochures in the District 1 lobby”.
- 3) In the pre-inspection questionnaire, EPA asked ITD if any public comments had been received regarding its stormwater program in District #1.
 - In response to Question 4, ITD stated that no public comments had been received.

Section 2.4 Illicit Discharge Detection and Elimination (IDDE)

Part II.B.3 of the Permit requires the Permittee to develop, implement and enforce a program to detect and eliminate illicit discharges to the MS4 in accordance with the specific requirements in Part II.B.3.a-g of the Permit. The findings from the file review and the field inspection are noted in separate sections below.

Findings from the File Review

- 1) In Part II.B.3.a of the Permit, the permittee must develop and implement a program that includes written procedures for detection of spills, identification of the source of spills, and removal of non-stormwater discharges from the MS4 in order to ensure protection of the MS4. There is a spill response plan but only on the statewide level; there appear to be no specific procedures for spill response specifically for the ITD District #1's MS4 area. Similarly, there is training of ITD staff on how to respond to reports of illicit discharges, but it is unclear if any training is conducted regarding illicit discharges that specifically occur in the Permittee's MS4 area of District #1.
 - In response to Question 5, ITD noted that it "utilizes the following guides for spill response procedures: Section 52.00 of the ITD Maintenance Manual/Safety/Hazardous Material/Incidents or Spills, Section 1400.00 of the ITD Environmental Manual, and the Emergency Response Guide". A weblink was provided to the manuals.
 - In order to get a better understanding of how ITD had complied with the staff training requirement in Part II.B.3.a, EPA requested information regarding staff training on IDDE. In its response to question 1, ITD did not provide dates for when the training(s) occurred. ITD provided a list of District #1 personnel with current and expired certifications. ITD noted its NPDES Inspector course is led by Garth Newman who works in the ITD Headquarters office in Boise, ID.
- 2) Additionally, per Part II.B.3.a of the Permit, the Permittee must develop an information management database system to track the activities and actions of the program. The Annual Report lacked information regarding this database system (per Part IV.C of the Permit, ITD is required to include in each Annual Report, an assessment of "compliance with the permit and progress towards achieving the identified actions and activities for each minimum control measure in Parts II.B and II.C.). It is unknown if this system has been developed or is being utilized.
 - EPA requested a copy of the information management database system utilized for tracking the program, in order to get a better understanding of how the IDDE program is functioning. Assessing the information management database is recommended by the *MS4 Program Evaluation Guidance*. In response to Question 6, ITD stated that "the Operations Assistant enters information into an electronic file on the District server which is accessible to concerned personnel. The information is a combination of PDFs and Excel spread sheets". However, a copy of this file nor spreadsheet nor PDF was submitted as requested nor was a copy provided at inspection.
 - EPA also asked if any incidents of dry weather flows, illegal dumping, spills, or similar illicit discharges to the MS4 have been reported to ITD District #1, including the source(s) of the incident report and the number of incident responses. In response to Question 8, ITD stated, "There have been no signs of any of the listed incidents since the effective date of the MS4 Permit. Our latest dry weather screening effort was conducted on August 17, 2011 and the system

appeared to be dry with no signs of illegal dumping, spills, or similar illicit discharges”.

Findings from Field Inspection

- 1) Regarding spills into the MS4, Mr. Perfect stated that there have been no spills since its MS4 permit became effective. In describing how spills are managed, Mr. Perfect gave the example of a car accident spill. When a crash is reported to ITD, the District contacts the state communications department, which then coordinates response with the Idaho Department of Environmental Quality (IDEQ) and other responder agencies. The crash site is investigated by ITD, who determines the appropriate response; in the case of larger spills, IDEQ handles the response. Otherwise, it is ITD that handles the immediate and first response of most spills. ITD made copies of the manuals and guides available on inspection. Mr. Hartz stated that responders go through first aid and hazardous materials handling training. He also noted that staff goes through general IDDE awareness training; the level of training increases depending on what is the employee’s level of response.
- 2) During the inspection, EPA asked to see a hard copy of the information management database system that tracks the activities of the IDDE program. Mr. Hartz responded that no calls, complaints or reports have been received regarding illicit discharges or spills into the MS4. He said people generally call other entities like the local fire or police departments, IDEQ, etc. to make such reports.
- 3) Per Part II.B.3.d of the Permit, ITD must update and complete its comprehensive MS4 map. However, in reviewing the map during the inspection interview, EPA asked about certain catch basins and manholes that appeared to be outside of ITD’s right-of-way. Mr. Perfect noted that some manholes and catch basins are not necessarily its own but are actually in the City of Coeur d’Alene’s MS4. Color copies of ITD’s MS4 maps are provided in Appendix C.

Areas of Concern

There was no consistent naming or numbering of the monitoring locations and outfalls. It is imperative that a consistent numbering and nomenclature system exist for ITD’s outfalls and sampling points.

The MS4 map should be updated accordingly to accurately reflect which MS4 features are its own, i.e., catch basins and manhole covers. Additionally, the catch basins and manholes within its MS4 should be cited with GIS mapping tools.

Section 2.5 Construction

As stated in Part II.B.4 of the Permit, the Permittee “must develop, implement, and enforce a program to reduce pollutants in storm water runoff to the MS4 from construction activities resulting in land disturbance of one acre or more”. The program must include, at a minimum, the specific requirements in Part II.B.4.a-h of the Permit. Based on the implementation plan and time frames required in the Permit, the construction-related program elements were required to have been fully implemented at the time of inspection.

Findings from File Review

- 1) In the pre-inspection questionnaire, EPA asked how many construction plans were reviewed and/or approved, per Part II.B.4.e of the Permit.
 - In response to Question 10, ITD replied, “There have been no construction projects planned or implemented within the ITD MS4 area since the effective date of the MS4 Permit”.
 - EPA additionally inquired about the training of staff that review erosion and sediment control plans, including when and/or how often are they trained in review of plans. There was no response to this question.
 - Furthermore, EPA asked if it is ITD’s policy that CGP coverage be obtained by all projects disturbing less than one acre of land but are part of a larger common plan of development disturbing one or more acres of land. In response to Question 11, ITD stated, “The District does not have a particular policy regarding common plans of development; however, we do acknowledge the regulatory applicability of NPDES for projects disturbing less than one acre of land but are part of a larger common plan of development disturbing one or more acres of land”.

Findings from Field Inspection

Regarding training for staff that review sediment and erosion control plans, Mr. Hartz said that review staff go through an ITD-led NPDES Inspector Training that is focused on construction. It is a 3-day training, with an annual 8-hour refresher training. Additionally, he stated that, with ITD’s Water Pollution Control Management program, it is ITD’s standard operating procedure to have contractors and other related construction operators to be made aware of stormwater and water quality issues. Mr. Hartz added that all ITD construction projects undergo the review of a third party inspector when endangered species might be affected by the project; he noted this is required per the Consent Decree.

Section 2.6 Post-Construction

The requirements in Part II.B.5 of the Permit must be completed within three years of the effective date of the Permit (except for Part II.B.5.d, which is four years), thus ITD was not evaluated on these components.

Findings from File Review

With consideration of the requirements' deadlines, this permit component area did not need to be evaluated at this time. However, in the 2010 Annual Report, ITD stated that it "considers post-construction runoff quality from all projects it develops and implements with the goal of achieving minimum standards for stormwater treatment, as established by local stormwater authorities".

Section 2.7 Pollution Prevention and Good Housekeeping

Part II.B.6 of the Permit requires the Permittee to develop and implement an operation and maintenance program to prevent or reduce pollutant runoff from municipal operations. The program must include, at a minimum, the specific requirements in Part II.B.6.a-d of the Permit.

Findings from File Review

- 1) Per Part II.B.6.a of the Permit, within two years from the effective date of the Permit, the Permittee must develop and implement an operation and maintenance program to prevent pollutant runoff from municipal operations. Annual Reports addressed some areas of the program but lacked information on other areas, specifically street cleaning and maintenance, stormwater system maintenance, snow removal practices, and snow disposal site operations and maintenance.
 - In response to Question 12, ITD stated it "has an annual contract to sweep pavement within the permitted areas with street sweepers (mechanical and vacuum). The work is done annually during the month of April. The catch basins of the drop inlets along I-90 in Coeur d'Alene are cleaned during the same interval. Snow removal is performed on a 24 hour bases [sic] during storm events, with salt applied at a rate of 150 pounds a lane-mile every hour. This melts all the snow down to the pavement. No snow is picked up to be disposed of at another site. In the event of icy conditions salt brine is applied, as needed, at 35 gallons per mile, as often as twice a day. Snow berms are left to melt, on the shoulder of the road, beyond the pavement edge. Most of the snow melt has to pass through vegetation before entering drainage ditches. That snow that does not pass through vegetation goes directly into the drop inlets".
 - While such information is not required in the Permit, it is recommended in the *MS4 Program Evaluation Guidance* to obtain data regarding how much of a storm system is inspected, in order to get a better understanding of the

maintenance of the system. EPA also asked in Question 13 about the amount of the storm system that is inspected. ITD replied, “There are no hard data to describe the amount of storm system inspected each year. As mentioned previously, catch basins are cleaned annually. Other than catch basins, the system only consists of hard pipe and open ditches which infrequently require cleaning to bring ditches back to the grade”.

- Furthermore, EPA asked if there is annual inspection and cleaning of catch basins, stormwater management structures, and open structures. In its response to Question 14, ITD noted that the MS4 catch basins are inspected annually. It also stated, “There are generally no stormwater management structures within the system other than conveyance structures such as metal and concrete culverts. These structures are generally assessed annually to ensure they are in proper working order, though maintenance of these structures has not been necessary”.
- Lastly, EPA requested numbers and data regarding the volume and/or weight of trash and debris removed as part of operations and maintenance in the area of the MS4, in order to obtain a fuller understanding of how the MS4 system is managed and maintained. In response to Question 15, ITD stated there was “no hard data for volume or weight” of debris removed from its highway and storm system.

Findings from Field Inspection

During the field inspection, a tour was made of ITD’s 40-acre facility on 2800 Ramsey Road in Coeur d’Alene. No points of discharge from the site into an MS4 or receiving waters were observed. ITD has salt, sand, and magnesium chloride stored at this site; a brine plant is also located at this facility. Brine is made on an as-needed basis; Mr. Hartz noted that it made 3.2 million gallons of brine in the last year.

Mr. Perfect stated that it has a contract with Aero Power Vac for the cleanout of catch basins, yet it was still unknown or unclear to ITD regarding the amount of volume cleaned out from the basins. Mr. Hartz noted that the majority of the volume of material removed from the basins is sand due to winter application on the highway system.

Mr. Perfect also noted that there is now more salt than sand used on the corridor. He stated the rationale for this change was that salt was more cost effective. In a post-inspection review of ITD’s compliance file, there was no information regarding how, per Part II.B.6.a, ITD’s program is addressing “municipal activities occurring within the permittee’s jurisdiction with the potential for negative storm water related water quality impacts including the use of...road deicers”, namely negative effects from the use of salt in road deicing.

Areas of Concern

In its response to Question 13 where ITD stated “There are no hard data to describe the amount of storm system inspected each year”. Such numbers and/or data should be tracked as they will give ITD an understanding of how well its system is functioning, what areas need maintenance, where problems may be emerging, and other factors in the management of its storm system. The MS4 is not exceedingly large and it should be achievable to count how many catch basins are cleaned annually, how many ditches (numbers, length) are inspected for maintenance, etc.

It is not clear if ITD has a standard operating procedure regarding how it determines if its activities are having negative water quality impacts and, if such a determination is made, how it addresses such negative impacts. It is unknown if ITD made an effort to assess if its use of salt in road deicing was having negative effects on the receiving waters, per Part II.B.6.a of the Permit. It may be useful to have monitoring of MS4 discharges occur in November through February in order to get a better understanding of the brine’s impacts to MS4 discharges and to receiving waters. At this time, monitoring is not representative and is not capturing the influx of salt into receiving waters from the MS4.

Section 2.8 Monitoring, Recordkeeping and Reporting Requirements

Part IV of the Permit details monitoring requirements. In Part IV.5, the Permit requires ITD to construct a stormwater discharge monitoring program no later than 18 months from the effective date of the permit. Specifically, ITD must sample the stormwater outfall(s) discharging to French Gulch and Fernan Creek, for pollutants identified in Table IV.A.

Findings from File Review

- 1) A good, brief summary regarding the results of the monitoring data was provided on page 12 of the 2010 Annual Report. However, per Table IV.A in Part IV.A.5 of the Permit, ITD is to monitor for temperature. However, temperature was not observed in the monitoring reports provided in the Annual Report.

Findings from Field Inspection

- 1) Mr. Perfect said that the direction of flow between Fernan Lake and Lake Coeur d’Alene can change depending on the time of year, i.e., the flow between the two waterbodies is affected by the lake level of Lake Coeur d’Alene as it is controlled at the dam at Post Falls. Mr. Hartz noted that residents in the area of Fernan Creek have reported problems but that those calls went to another agency first. Mr. Perfect stated that the problems in the area were related to the stagnant flow of the creek due to the lake level.
- 2) Mr. Perfect noted it is a challenge to catch high flows for sampling, e.g., if a high flow occurs at midnight, there is no one to go get it. Mr. Hartz noted ITD is looking to an

automated system for monitoring. He also remarked that ITD feels the monitoring requirements in the permit miss the highest flow times that the system experiences. Per Table IV.A of the Permit, the permittee is required to collect a minimum of four samples in a calendar year: “Monitoring should occur at least once during each of the following periods: March-April, May-June, July-August, September-October”.

- 3) During the inspection, ITD provided copies of its monitoring data for the MS4 sampling points. EPA asked why temperature was not included in the reports. Mr. Hartz said that temperature was recorded in the field books for the sampling points.
- 4) ITD noted that it is sampling from three locations: 1) French Gulch, 2) Sherman Avenue, and 3) 15th Street exchange, where it connects with the City of Coeur d’Alene’s MS4. In the case of this latter location, ITD believes there to be a connection between the two entities’ systems, due to the level of stormwater flows.
- 5) During the field inspection of the sampling points and outfalls, Mr. Hartz stated that it is sampling from 4 locations. There began to be some confusion between the naming and numbering of the sampling sites, particularly when ITD stated that it proposes to sample from a fifth location.
- 6) The first stop was at the sampling point at Sherman Road in Coeur d’Alene. It was also known as “Station 1”. Names and numbers of the sampling points were not noted on the MS4 map; only “Sampling Point” named the location on the map. For the purposes of reference in this report and for the photograph log, the stations listed in the monitoring results spreadsheet in Appendix B will be used. Color copies of ITD’s MS4 maps are provided in Appendix C. The outfall and/or sampling point at Sherman Road was a box culvert as an outlet to an open channel. It is at this location that ITD is considering installation of an automated monitoring station. This sampling point is depicted in Photos 1-3 in the Photo Log.
- 7) The second stop was on the east side of the southbound off-ramp to Sherman Road. French Gulch flows from an open channel through a 48” inch pipe from the east under I-90 and outfalls to an open channel on the west side of I-90. Still water was observed at the outfalls of the 3 pipes in this area. This sampling area, known as Station 2, is depicted in Photos 4 and 5. From this location, we walked over the off-ramp to the west side of the off-ramp. One culvert was observed on the open channel in this area. The culvert was dry; Mr. Hartz said this is one of their sampling points. This sampling point is depicted in Photo 6 and is known as Station 3.
- 8) The third stop was on French Gulch, east of I-90. It was a culvert under E French Gulch Road. Standing water was observed at this site. Mr. Hartz stated that it is sampling at this location because this area contributes a large portion of the flow into its system, thus ITD believes it serves as a good “control” in determining what flows to the Sherman box culvert. This sampling point is shown in Photos 7 and 8.
- 9) The fourth stop was on the west side of the onramp from N 15th Street onto I-90. Mr. Hartz noted that it used to sample discharges in the open ditch, but samples are now taken where the culvert daylight. Mr. Hartz stated that this point is known as Station #4; this sampling point is shown in Photo 9. In this area, ITD proposes to initiate a fifth sampling point; this point is depicted in Photos 10 and 11. It is located at the relief valve for 15th Avenue since it receives a high amount of flow. Mr. Hartz noted that it gushes

with a good rain; this was evident through observations of the scouring that has happened in the area. However, the valve/discharge point would appear to be the City of Coeur d’Alene’s pipe. These two sampling points, 4 and 5, flow to sampling point 2. Discharges from Pennsylvania Avenue flow into the drainage ditch before the overall flow reaches sampling point 2. Mr. Hartz noted that sampling at point 5 will begin on the next rain event.

Areas of Concern

During the inspection, Mr. Hartz inquired as to who needs to approve the Quality Assurance Plan (QAP). In reviewing this question post-inspection, ITD should be made aware that it is stated in Part IV.A.6 of the Permit that ITD must submit its QAP to EPA and IDEQ for review and approval as indicated in IV.D. Regarding who in ITD needs to sign the QAP, it is the official that meets the signatory requirements in VI.E of the Permit.

As noted earlier regarding ITD’s use of salt in road deicing, it may be useful to have monitoring of MS4 discharges occur in November through February in order to get a better understanding of the brine’s impacts to MS4 discharges and to receiving waters.

Temperature measurements, if noted in field notebooks, must be transferred to the monitoring reports for the sampling locations. Overall, there needs to be better organization of the monitoring data. As noted previously, a consistent naming and numbering system should be established. The naming and numbering of sampling points must match between the MS4 maps and the sampling points noted on the monitoring data. At this time, there is a lack of consistency and there is confusion between what are the exact sampling points.

Section 3.0 Additional Observations and Recommendations for Improved Stormwater Management by the Permittee

- 1) ITD likes the idea of a joint MS4 permit. ITD noted that monitoring is a challenge and thus it would be good to coordinate such efforts in the future. The representatives noted that a dialogue is happening amongst the different MS4 entities regarding entering into a joint permit in the next permit cycle; ITD said that it has had good interactions with the City of Coeur d’Alene.

Appendix A:
Inspection Schedule

Agenda for ITD District #1 MS4 Inspection

Friday, September 16, 2011

9:00	Opening Conference
9:15 – 11:00	Program Management, Effectiveness and Assessment (office)
11:00 – 12:40	Illicit Discharge Detection and Elimination (field)
	Public Involvement/Participation
12:40 – 12:50	Closing Conference

Appendix B:

Exhibit Log

- Pre-Inspection Questionnaire from U.S. EPA
- Pre-Inspection Questionnaire Answers from ITD District #1
- MS4 Monitoring Results from ITD District #1

Appendix C:

MS4 Maps Provided by ITD

Appendix D:

Photograph Log